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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,878	12/30/2004	Michael Bahr	112740-1037	7425
29177	7590 12/22/2005		. EXAMINER	
BELL, BOYD & LLOYD, LLC			MEHRPOUR, NAGHMEH	
P. O. BOX 11 CHICAGO,	135 IL 60690-1135		ART UNIT	PAPER NUMBER
,			2686	
			DATE MAILED: 12/22/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/519,878	BAHR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Naghmeh Mehrpour	2686				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
Responsive to communication(s) filed on  2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-15 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)  All b)  Some * c) None of:  1.  Certified copies of the priority documents have been received.  2.  Certified copies of the priority documents have been received in Application No  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/30/0	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	(PTO-413) ate atent Application (PTO-152)				

#### **DETAILED ACTION**

#### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### **Information Disclosure Statement**

2. The information disclosure statement filed reference listed in the information

Disclosure Submitted on 12/30/04 have been considered by the examiner (see attached PTO-1449

### Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "AT command" in claim 8 is a relative term which renders the claim indefinite. The term "AT command" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Therefore, "AT command" used as a "mere command" in the rejection.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 8, are rejected under 35 U.S.C. 102(e) as being anticipated by Liou et al.(US Patent 2003/0207703 A1).

Regarding claim 8, Liou teaches radio module which may be operated in at least two modes of operation, comprising:

a radio device (6, 36);

an internal microprocessor device connected to the radio device 36', and an interface which is connected to the internal microprocessor device, the interface including a plurality of connection pins for connecting the radio module to at least one external electrical apparatus 7 (0022-0023);

wherein in a passive mode of operation, an external microprocessor device is connected to the radio module as an external electrical apparatus (0026), the radio module 6 is used as a modem for the external microprocessor device (function as wireless data link), and the radio module may be actuated by the external microprocessor device using AT commands (0026);

wherein in at least one active mode of operation, at least one actuator or sensor 4 is connected to the radio module as an external apparatus, the radio module at least one of actuates and reads the at least one actuator or sensor and may be actuated externally via the radio device (0023, 0026); and

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wherein an electrical assignment of the plurality of connection pins is reconfigurable such that the internal microprocessor device uses at least one of the plurality of connection pins 5 both for the passive mode of operation and for one of the active modes of operations (0026). Connector 5 can be used for both active mode (headset is used with the radio 6) and passive mode (PC, Connected, 0027).

Regarding Claim 9, Liou inherently teaches a radio module as claimed in claim 8, wherein the internal microprocessor device is programmed with at least two software programs, with one software program forming an operating system of the radio module (radio 6 using the headset, 0023, 0026-0027), which stipulates the electrical assignment of the connection pins for each of the at least two modes of operation of the radio module (0035), and with at least one further software program forming application software which stipulates a respective mode of operation of the radio module (USB connected to the PC 7. 0024).

Regarding Claim 12, Liou inherently teaches a radio module as claimed in claim 10, wherein the application software is interpreter software.

Regarding Claim 15, Liou inherently teaches a radio module as claimed in claim 9, wherein the passive mode of operation is stored entirely in the operating system (0023-0025).

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### Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 10, is rejected under 35 U.S.C. 103(a) as being unpatentable over Liou et al.(US Patent 2003/0207703 A1) in view of Hanson et al. (US Publication 2002/0098840 A1).

Regarding Claim 10 Liou does not specifically mention a radio module as claimed in claim 9, wherein the application software may be altered externally by a user, whereas the operating system cannot be altered by the user. However, Hanson teaches a radio module as claimed in claim 9, wherein the application software may be altered externally by a user, whereas the operating system cannot be altered by the user (0101, 111). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hanson with Liou, in order to provide to provide security and be user friendly for the system.

8. Claim 11, is rejected under 35 U.S.C. 103(a) as being unpatentable over Liou et al.(US Patent 2003/0207703 A1) in view of Bajikar (US Publication 2003/0003943 A1).

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Regarding Claim 11, Liou fails to teach a radio module as claimed in claim 10, wherein the operating system is formed by firmware. However, Bajkak teaches a radio module as claimed in claim 10, wherein the operating system is formed by firmware (0004). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hanson with Liou, in order to provide permanent storage of ACPI table information.

9. Claim 11, is rejected under 35 U.S.C. 103(a) as being unpatentable over Liou et al.(US Patent 2003/0207703 A1).

Regarding Claim 13, Liou does not specifically mention that a radio module as claimed in claim 12, wherein the interpreter software is based on one of Basic and Java programming languages. However, the Examiner takes official notice that a radio module as claimed in claim 12, wherein the interpreter software is based on one of Basic and Java programming languages is well known in the art. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching with Liou, in order to provide to provide security and be user friendly for the system.

10. Claim 14, is rejected under 35 U.S.C. 103(a) as being unpatentable over Liou et al.(US Patent 2003/0207703 A1) in view of Benedyk et al. (US Patent Number 2005/0033684).

Regarding Claim 14, Liou inherently teaches the application software is separate from the operating system such that the radio device and the interface may be actuated exclusively by the operating system, such a set up is common in most of the system (0021-0026). Liou fails to teach the application software may access the interface and the radio device exclusively under switching and control of the operating system, and the application software is prevented from accessing the interface and the radio device directly. Benedyk teaches a radio module the application software may access the interface and the radio device exclusively under switching and control of the operating system, and the application software is prevented from accessing the interface and the radio device directly (0021, 0036). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Benedyk with Liou, in order to provide security and protection to the user.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Okazaki et al.** (US Patent 6,889,043) disclose method of controlling a communication terminal having a plurality of functions communication terminal apparatus communication control system

Nassimi (US Publication 2004/0204155 A1) disclose non-rechargeable wireless headset

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**Lee** (US Patent 6,885,848) disclose apparatus for preventing loss of portable telephone using a Bluetooth and control method thereof

### 12. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

December 19, 2005